Appl. No. 10/621,092 Amdt. Dated August 11, 2004 Reply to Office action of May 13, 2004

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

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Claim 1 (currently amended): A magnetron, in which both a strap-engaging concave portion for joining a strap ring and a strap-inserting concave portion for inserting therethrough the strap ring in a non-contact manner are provided on an upper edge and a lower edge of each of anode vanes in such a manner that the strap-engaging concave strap-inserting concave portion the portion and are shifted from each other along a positionally radial direction of an anode tubular body; the anode vanes arranged along a circumferential direction are electrically connected to each other every one vane by any one of a small-diameter strap ring and a large-diameter strap ring coaxially arranged with respect to a center axis of the anode tubular body, is joined to the strap-engaging concave portion; and a microwave radiating antenna passing through an output-sided magnetic piece in a non-contact manner is joined to one anode vane among the plural anode vanes, wherein, in such a case that a radial dimension of an outer circumference of the small-diameter strap ring is sl a radial dimension of an inner circumference of the large-

a radius of a circumference

diameter strap ring is s2

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- inscribed to tip portions of the anode vanes is a and a radius of a central flat portion of the <u>output sided</u>
  magnetic piece located in the <u>a</u> vicinity of each of the anode vanes is "Rp", the values of Ra, Rs1, Rs2, Rp are set in <u>such</u> a manner that the <u>satisfies both</u> following formulae

  (1) and (2) can be established:
- - Claim 2 (currently amended): A magnetron according to claim 1 wherein a depth dimension of the strap-engaging concave portions provided on the upper/lower upper and/or lower edges of each of the anode vanes is set in such a manner that the strap rings engaged with the strap-engaging concave portions are sunk inwardly with respect to the upper/lower upper and/or lower edges of each of the anode vanes.
  - Claim 3 (original): A magnetron according to claim 1
    wherein an interval along an axial direction between an
    output-sided end hat provided on one edge of a cathode and
    the upper edge of each of the anode vanes is set to 0.2 to
    0.4 mm.

## **Amendments to the Drawings:**

The attached sheets of drawings includes changes to Figs. 10, 11, 12(a)-(e) and 13. These sheets, which includes Figs. Figs. 9, 10, 11, 12(a)-(e) and 13, replaces the original sheets including Figs. 9, 10, 11, 12(a)-(e) and 13. Figs. Figs. 10, 11, 12(a)-(e) and 13 have been labeled as "Prior Art".

Attachment: Replacement Sheets (3 total)